GUISBOROUGH URBAN DISTRICT COUNCIL.

COMBINED DISTRICT COUNCILS

GUISBOROUGH UNION.

REPORT

FOR THE YEAR 1913

OF THE

MEDICAL OFFICER OF HEALTH,

W. W. STAINTHORPE, M.D. C.M., D.P.H.

STOKELD, PRINTERS GUISBRO'.

To the Chairman and Members of the Guisborough Urban Council.

GENTLEMEN,

I have pleasure in submitting for your consideration my Report for the year ending December 31st, 1913.

The town of Guisborough lies in a shallow valley among the Cleveland Hills. It is situate on the lower lias (soft sands and micaceous shale).

The bulk of the adult population is engaged in iron-stone mining.

Birth and Mortality Rates.

Population estimated at middle of year ... 7100.

Births (corrected) ...	211 (101 males, 110 females).
Birth rate	29·71.
Deaths (corrected) ...	101 (53 males, 48 females).
Death rate	14·22.
Infant mortality rate (per 1000 births)	109·0.
Infectious diseases death rate (tuberculosis excluded)	1·62.
Tuberculosis death rate ...	1·69.
Diarrhœal diseases death rate	0·14.

Inspections.

Nuisances ascertained to exist during visits made by the Inspector are either reported by entry in his journal, or the particulars are forwarded to the owner or agent of the property, or to me. Those which come under my own observation are either reported direct to the Council or particulars are forwarded to the Inspector for entry in his journal, or are communicated to the owner or his agent. The Inspector's journal and my report are placed before the Council (or a Committee) at each of its monthly meetings. The several items in the journal and the report are considered and instructions are given for the serving of the necessary notices. In most cases an informal notice is issued, if not complied with the matter is reported to the Council.

In many of the inspections made I was accompanied by Mr. Kilburn. Most of the special visits were for the purpose of making enquiries concerning cases of infectious diseases notified.

Number of Inspections under Housing Acts	125
Ditto under Factory and Workshop Act	140
Ditto under Dairies and Cowsheds Order	78
Ditto of slaughterhouses	48
Ditto of premises where food is prepared	21
Ditto of common lodging-houses ...	6
Number of visits under Notification Act	60
Number of notices sent to Teachers (re infectious cases) ...	48
Number of premises disinfected	42
Number of informal notices served	77
Number of statutory notices served	48
Number of notices complied with	98

Sewage Disposal.

The sewage passes into a settling tank thence on to land leased by the Council. It was found that a large quantity of water passed into the sewer at various points. The work necessary to avoid this was carried out. The decrease in the amount of the sewage, or rather in the bulk of the sewage, thus brought about and the larger area of land now utilised in the summer for its purification it is hoped will prevent a recurrence of the complaint that the effluent was not sufficiently purified.

Scavenging, &c.

Number of water closets	298.
Number of fixed ashpits in combination with conveniences	146.
ditto not in combination ditto	37.
Number of moveable receptacles of galvanised iron with proper covers ...	20.
ditto of other kinds (buckets, boxes, &c.) ...	1168.
(Note :—of the 1168 receptacles 1084 are closet pails).	
Number of refuse middens replaced by moveable receptacles during the past five years	139.

The scavenging is carried out by the Council's employees. Pails are emptied once a week, fixed receptacles once a fortnight. A covered cart is used for the collection of refuse. In some instances the refuse is emptied on to streets before being carted away to the Council's tip where marketable material is sorted out and sold. The sorted refuse is conveyed to farms and allotments in the district.

Trade refuse is conveyed to the tip and burned. The streets are scavenged by the Council's employees. Manure from cowsheds, stables, &c., is removed by the occupier :—the Bye-law repuires that such manure be removed once a week.

Water Supply.

In June I was informed by one of the medical practitioners that he had a number of cases of lead poisoning under treatment. On June 30th, I took samples of the water from taps in four houses, which I handed to a Firm of analytical chemists. Traces of lead were found in three of the samples. In July a handbill was issued by the Water Company. The statements made therein were such as to render it necessary for me to make a special report to the Council on the subject. A copy of this report was forwarded to the Local Government Board, the regulations of that Board requiring copies of all such reports to be sent to it. In August Dr. Frank Seymour, one of the medical officers of the Local Government Board, visited Guisborough for the purpose of obtaining information on the matter. Dr. Seymour's report, received recently, deals so fully with every point connected with the subject of the enquiry as to render it unnecessary for me to make any statement. I will however quote the following from his report: "no supposition other "than the action of an agency such as the drinking water, common to the whole community, "would meet the case."

At one period of the year, the late summer and early autumn, the water contained such an amount of earthy and vegetable matter as to render it absolutely unfit for domestic use. During this time the inhabitants obtained their supply from two springs and from private wells. The waters in some of the wells had not been used for some time. Under the circumstances it was deemed necessary to have these waters analysed. This was done ; in two instances the analyses indicated sewage pollution :—a bacteriological examination of these waters showed one to be unfit for use :—steps were taken to prevent the public using it.

To improve the quality of the water the Company has made the following alterations and additions,—removed the filters to a higher point, nearer the reservoir,—increased the number of (Candy) filters from two to three,—constructed a service tank of 80,000 gallons capacity into which the filtered water passes,—provided means for so treating the water as to make it non-plumbo-solvent.

A clause in the Order under which the Company obtained increased powers requires that water supplied to the town shall have no solvent action on lead.

Four deaths were certified as due to plumbism, two males, two females :—one of the deceased was a painter.

Cowsheds and Dairies.

The register contains the names and addresses of twenty-seven cowkeepers and three dairymen. During inspections of the cowsheds it was noted that in some cases the receptacles provided for manure did not comply with the bye-laws :—notices were recently served upon the owners of these to provide proper receptacles. In some instances manure is allowed to accumulate to too great an extent. One shed was found too small for the number of cows housed therein :— notice has been served upon the owner to remedy this defect.

Food Inspection.

The premises on which foods are prepared or stored for sale are :—

Bakehouses	...	inspected under Factory and Workshop Act	5
Ice-cream making	...	do. do.	2
Sausage making	...	do. do.	3
Slaughterhouses	...	inspected under Byelaws ...	6

The inspections of slaughterhouses numbered 54. A number of carcases were examined, none found unfit for food. Three notices to remedy defects were served, two complied with.

Schools.

The schools in the district are :—

Northgate Elementary.
Providence Elementary.
Guisborough Grammar.
Barnaby Moor Elementary.

The town's water is laid on to the first three named. The school at Barnaby Moor is very small provided as it is for the children living in the few cottages there.

In December last I wrote to the Local Education Authority suggesting that water-closets be substituted for pail closets. In reply the Secretary states that water-closets would have been constructed had there been drainage facilities. It is desirable that the Council provide these facilities.

Housing, Town Planning, &c., Act, 1909.

Number of dwelling-houses inspected under the Housing, Town Planning &c., Act, 1909	95
Number of dwelling-houses considered unfit for habitation	nil
Number of representations made with a view to making closing orders ...	2
Number of closing orders made	nil
Number of dwelling-houses in which the defects were remedied without the making of closing orders	nil
Number of dwelling-houses made fit after making of closing orders ...	nil
Number of notices served to make houses fit for habitation	nil

Condition of houses inspected as to

Lighting.		Air Circulation.		Cleanliness.		
Good ...	76	Good ...	76	Clean ...	48	
Fair ...	19	Fair ...	19	Fair ...	39	See Note.
Bad ...	0	Bad ...	0	Not clean ...	6	
				Dirty ...	2	

Note.—The word " Fair " is used when the conditions are such as to leave room for improvement : " Not clean " where the room for improvement is considerable : " Dirty " where it is desirable to give notice under Section 46 of the Public Health Act, 1875.

Average number of persons per house	5·2
Ditto bedroom ...	1·9

Particulars of defects found :—

House yards in defective condition	15
Damp or defective walls	24
ditto ditto floors	27
ditto ditto pantries	13
Defective windows	7
Defective roofs	3
Other defective or insanitary conditions	14

Occasionally I accompanied Mr. Kilburn when he was making inspections under the Act.

House Accommodation.

Whatever lack there is in house accommodation is due not so much to the insufficient number of dwellings as to the number of those with insufficient bedrooms accommodation for workmen with families, many of the older houses in the town being quite inadequate in this respect for that class of occupant.

Four houses were erected during the year. Recently plans for fifty-three houses were laid before the Council and approved of.

Only two of the houses inspected under the Housing Acts contained two families. The Average number of persons per bedroom was 1·9. The average number per house was 5·2, this is slightly larger than the census returns showed it to be in 1911.

Infectious Diseases (Notification) Act.

Cases of Infectious Disease notified during the year 1913.

Notifiable Disease.	Number of Cases Notified.								Total Cases Removed to Hospital.
	At all Ages.	At Ages.—Years.							
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 45.	45 to 65.	65 and upwards.	
Diphtheria (including Membranous croup) ..	18		5	9	2	2			
Erysipelas	3					1	1	1	
Scarlet Fever	28		4	21	1	2			13
Pulmonary Tuberculosis ...	12				3	6	2	1	
Other forms of Tuberculosis ...	8		1	5	1	1			
Totals	69		10	35	7	12	3	2	13

No case of any of the following diseases was notified :—

small-pox, typhus fever, enteric fever, puerperal fever, cerebro-spinal fever, acute poliomyelitis.

There are certain factors influencing the spread of the infectious diseases of childhood which require fuller appreciation than is accorded them at present. Given two districts or two parts of a district, A and B. Let the child population in A be greater proportionately than in B, then in A the number of cases will, other things being equal, be larger than in B. Let there also be in A the existence of some condition (not present in B) which favours the spread of the disease, such as the aggregation of a large number of houses of one type the occupants of which intermix freely with their neighbours, then the greater prevalence of the disease in A can be readily understood and does not require for its explanation the assumption that it results from some local insanitary condition. It is very important that the public should understand the conditions which lead to the dissemination of infectious diseases. Anything which fosters the belief that this is due to defects in sanitary arrangements induces carelessness. It is natural that it should be argued that if such defects are the cause, it is useless to take the usual precautions as to isolation, &c.

On receipt of a notification the following information is obtained and entered on a Form:—the day and Sunday schools attended by children living in the infected house, the occupation of the householder and of other adults, the milk supply, the number of occupants, the number of rooms. Where it appears necessary or desirable I visit the infected house. Disinfection of bedrooms is carried out by the Council's workmen under the supervision of the Sanitary Inspector.

Scarlet Fever.

Number of cases notified	...	28.
Number of deaths ...	...	nil.
Case mortality	...	nil.

Of the twenty-eight cases (in 19 houses) reported, sixteen occurred during the first quarter of the year, none in the second, six in the third, and six during the last quarter. Of the sixteen notified during the first three months twelve occurred in January. In the second week of this month patients were removed to the Sanatorium. The total number of patients removed thereto during the year was thirteen. There is little doubt that the isolation of patients in the Sanatorium checked to a considerable extent the spread of the fever.

When several cases of scarlet fever occur among children grouped together in a school it is probable that in many instances the medium of infection was a child suffering from the disease in its initial stage. It is not uncommon to be informed when making enquiries at school that such and such a child was sent home as it appeared to be feverish or was sick. Assuming that the child was subsequently found to be suffering from the fever it can readily be understood that it may have affected children sitting near it.

Diphtheria.

It does not follow when the specific bacilli of diphtheria invade a body that the disease will manifest itself (if ever it does so) after the ordinary incubation period. Diphtheria is first a local disease then a general. If the local conditions, that is the state of the mucous membrane of the mouth, throat, nose, &c., are unfavourable to the growth of the bacilli at the time of invasion they fail to produce the disease. But the bacilli may remain in contact with the membrane for a considerable time ready to take effect should the conditions change in such a way as to favour their growth and the production and absorption of the poison which renders the disease general.

Number of cases notified	...	18.
Number of deaths ...	...	1.
Case rate mortality ...	...	5·5 per cent.

The eighteen cases occurred in sixteen houses. The disease was sporadic never becoming epidemic. During the first quarter of the year five cases were reported, four in the second, four in the third, and five in the last quarter. Ten 'swabs' were submitted for bacteriological examination, six for the purpose of assisting diagnosis, three to ascertain whether or not convalescents were infection-free and one from a contact:—six were found positive, four negative.

Measles.

This disease prevailed during the first quarter of the year causing 5 deaths (all in February).

Much difference of opinion exists as to whether or not children living in a house infected with measles should be permitted to attend school. In his Supplement to the Annual Report of the Local Government Board for the year 1912—1913 Dr. Newsholme (the Chief Medical Officer of that Board) says "Not infrequently objection is raised to the attendance at school of children "who have had measles and are over the age of attendance in infant schools, who come from "households in which there is a case of measles. Such attendance under the common conditions "of town life is justifiable, so long as it remains true that most of the children above the infant "classes have already had measles. All clinical evidence points to the conclusion that measles "is infectious chiefly by direct conveyance from the patient, and that its conveyance by fomites "(clothing, etc.), is negligible."

Enteric Fever.

The total number of cases of enteric fever notified in the whole of the districts in the Union was four. Three of these occurred in the Redcar district, the fourth in the Skelton and Brotton. One of the three in Redcar apparently was contracted from one of the other two in that district. The source of infection of the others I was unable to trace definitely:—one was possibly due to infected shell-fish, one probably contracted out of the district.

Tuberculosis.

The following Table shows the number of cases, &c., notified in the several districts.

District.	Pulmonary.	Other Forms	Total.	Males.	Females.	Rate per 1000 of the population.
Guisborough Rural ...	11	6	17	7	10	2·16
Guisborough Urban ...	12	8	20	10	10	2·81
Loftus Urban ...	11	4	15	11	4	1·61
Redcar Urban ...	18	10	28	15	13	2·43
Saltburn Urban ...	2	4	6	2	4	1·71
Skelton & Brotton Urban	15	20	35	24	11	2·18
Totals, &c. ...	69	52	121	69	52	2·18

The Public Health (Tuberculosis) Regulations, 1912, which came into force February 1st, 1913, require the notification of cases of tuberculosis of all forms. The medical officer of health or an officer of the Local Authority acting under the instructions of the medical officer of health is required to make enquiries and take such steps as are necessary or desirable for investigating the source of infection, for preventing the spread of infection and for removing the conditions favourable to infection. The Local Government Board suggest that the Tuberculosis Officer should undertake the duties, or some of them, of the medical officer of health. As no such officer has as yet been appointed I have had no assistance in carrying out the duties.

For the better appreciation of the difficulty met with in endeavouring to trace the source of infection it is desirable to make a short statement of what is known as to the cause of tuberculosis and of the means by which it is dissemminated. The disease is due to the invasion of the body, generally by inhalation or ingestion, of the specific bacilli. The time the symptoms manifest themselves bears no relation to the time of invasion. It is probable that in some instances the invasion is accompanied by symptoms of an indefinite character. In one individual the bacilli may be overcome and destroyed, in another they may be imprisoned in some organ or tissue of the body remaining there in a dormant state ready to resume activity if by any means they are liberated. It will thus be understood that the true source of infection may be difficult to trace.

The sputum of a patient suffering from pulmonary tuberculosis contains the specific bacilli :—infection may be contracted therefrom by the inhalation or ingestion of fine particles of the dried sputum The disease may be contracted by the use of tuberculous milk or meat :—the information at present possessed renders it impossible to say to what extent the one or the other is responsible.

Of the 121 houses in which tuberculosis was notified to exist 105 were visited by me, to 29 subsequent visits were paid. In by far the larger number of cases it was impossible to arrive at any conclusion as to the source of infection.

In each of thirteen instances it was ascertained that the disease had been contracted before the patient had come into the district. In each of five cases it is probable that the infection proceeded from a previous case in the house. Two patients, a soldier and an ex-soldier, apparently became infected whilst serving in the Army. Four either contracted the disease whilst resident in asylums or it was latent in them at the time of admission.

Predisposing Causes. Post-mortem examinations show that very many persons who have died from diseases other than tuberculosis have at one time or another been invaded by the tubercle bacilli :—the many are invaded, the few (comparatively) become the prey ;—the many overcome the foe, the few are unable to do so. The inability to overcome appears in some instances to be inherited, in others it results from living under conditions inimical to health generally. It is assumed therefore that whatever promotes the attainment of 'the sound mind in the sound body' increases resisting power. Soundness of mind, using that term in its broadest sense, is an important factor, a factor which is not sufficiently appreciated. There is little doubt that grief and worry lower the vital power considerably, probably to a greater extent even than unhealthy environment.

In one third of the cases enquired into it was ascertained that one or other near relative was suffering from or had succumbed to consumption. Could precise information on the point have been obtained there is little doubt that this proportion would have been found larger. The cause of death of a relative is not always known especially if that relative has died during the childhood of the patient whose case is under enquiry. Nor is it to be overlooked that whilst death from pulmonary tuberculosis (consumption) may be known to members of the family, death from some other form of the disease is not so likely to be.

Of the predisposing causes the chief are :—

Deficient nutrition resulting from unsuitable or improperly cooked food or its insufficiency.
Inefficient bedroom ventilation.
Inadequate or excessive clothing.
Neglect of minor ailments.
Prolonged physical or mental strain.
Bad home conditions causing neglect of children.
Alcoholic or other excesses.
Anxiety or grief.
Unhealthy environment.

Of the 105 houses visited by me it was found that in 72 the environment was good, in 32 it was fair, in one bad :—in 62 the home conditions were good, in 28 they were fair, in 15 bad. In the 15 mentioned there were signs of general neglect. There was no indication that the disease unduly affected persons following any particular employment. Of the male adult patients ten were miners, five labourers, three clerks, three engineers, two masons, two draughtsmen : — the employment of the remainder varied. Of the female adults four were or had been in domestic service,—twenty-three were ' housewives.' Two members of one family were attacked the disease manifesting itself in each at such time as precluded any probability that the one contracted it from the other, moreover they resided in different districts and had not, previous to being attacked seen each other for some time. Many years ago this family came under my observation owing to the very bad home conditions which existed, conditions which undoubtedly contributed very materially to the members mentioned becoming a prey to the disease.

Action Taken.— Such advice was given in each case as the circumstances called for. Cuspidors and cards of instructions were supplied where needed. Where insanitary conditions existed (in very few instances were such found) steps were taken to have them remedied. In such cases as appeared desirable the names and addresses of school children living in the houses were forwarded to the Medical Inspector of school children in order that they might receive special attention. Bedrooms occupied by those suffering from tuberculosis were disinfected after the death or removal of the patient. In a few instances it was found either unnecessary or undesirable for various reasons to take any action.

Of the persons notified to be suffering from tuberculosis forty-two were insured (under the National Insurance Act) and forty-seven were the dependents of insured. Fourteen of the insured received Sanatorium treatment, one Domiciliary treatment. Of the fourteen mentioned four were discharged after periods varying from seventeen days to ten weeks :—these four died soon after discharge. Three improved after eight weeks treatment 'and are now following their usual employment. ' Two on discharge left the district,—their condition is unknown. The condition of two remains the same. One subsequently was admitted to another sanatorium,—one is at present very ill,—one is still in the sanatorium.

The number of deaths resulting from tuberculosis in the several districts was as follows :—

	Pulmonary.	Other forms.	Total.
Guisborough Rural ...	8	1	9
Guisborough Urban ...	8	4	12
Loftus Urban	3	2	5
Redcar Urban	10	7	17
Saltburn Urban	2	1	3
Skelton & Brotton Urban ...	8	7	15

There are certain desiderata in the treatment and prevention of tuberculosis (and these cannot be divorced) which require very careful consideration,—these are :—

(1) The exercise of the greatest possible care in the selection of cases sent to sanatoria; unless this be done this one form of treatment will fall into disrepute.

(2) The provision of a hospital for those in a hopeless condition whose return home would be a menace to the health of the family.

(3) The provision of some arrangement for the after-care of patients discharged from sanatoria.

Factory and Workshop Act.

There are on the Register 11 factories and 59 workshops, as follows :—

Factories :—	
Printer	1
Gas works	1
Builder	1
Laundry	1
Foundry	1
Sawmill	1
Fried-fish shops	1
Sausage makers	3
Shoemaker	1
	11

Workshops :—	
Carpenters	10
Shoemakers	9
Dressmakers and Milliners ...	8
Tailors	5
Bakers	5
Blacksmiths	4
Fried-fish shops	2
Saddlers	2
Tinsmiths	3
Ice-cream makers	2
Plumbers	2
Printer	1
Leather-dresser	1
Confectionery maker ...	1
Cycle repairer	2
Rope maker	1
Sausage-skin dresser ...	1
	59

Three notices to remedy defects were served and compled with.

Table of Birth and Mortality Rates in the several Districts in the Union.

DISTRICT.	Population estimated to middle of year 1913.	Births :— Uncorrected number.	Births :— Corrected number.	Birth Rate.	Deaths registered in District.	Death Rate.	Deaths of Non-residents registered in the District.	Deaths of Residents not registered in the District.	Deaths of Infants (under 1 year of age).	Infant Mortality Rate.	Total number of Deaths at all ages.	Death Rate.	Infectious Diseases Death Rate (excluding tuberculosis).	Tuberculosis Death Rate.	Diarrhœal Diseases Death Rate.
Guisborough Rural ...	7860	190	190	24·17	119	15·13	2	7	17	89 4	124	15·77	1·14	1·14	Nil
Guisborough Urban ...	7100	214	211	29·71	114	16 05	16	3	22	109·0	101	14·22	1·25	1 69	0·14
Loftus Urban ..	9300	279	279	30·00	121	13 01	0	9	37	132 6	130	13·97	1·62	0·54	0·9
Redcar Urban ...	11500	256	258	22·46	142	12·34	6	13	28	108 5	149	12 95	1·04	1·21	0 52
Saltburn Urban ...	3500	53	53	15·08	36	10 28	4	7	5	94·4	39	11 14	0·86	0 86	Nil
Skelton & Brotton Urban ...	16000	463	465	29·06	186	11 62	1	12	58	124·7	197	12·31	0·56	0·93	0·62
Totals and Averages ..	55260	1455	1456	26·34	718	12·99	29	51	167	114·6	740	13·39	1·04	1·10	0·47

Table III.

Causes of, and Ages at Death during the year 1913.

CAUSES OF DEATH.	Nett Deaths at the subjoined ages of "Residents" whether occurring within or without the District.									Total Deaths whether of "Residents" or "Non-Residents" in Institutions in the District (b).
	All ages.	Under 1 year.	1 and under 2 years	2 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 45 years.	45 and under 65 years.	65 and upwards.	
1	2	3	4	5	6	7	8	9	10	11
All causes { Certified All										
All causes { Uncertified										
1. Enteric Fever										
2. Small Pox										
3. Measles	5	1		3	1					
4. Scarlet Fever										
5. Whooping Cough	1		1							
6. Diphtheria and Croup ...	1			1						
7. Influenza	2						1	1		
8. Erysipelas										
9. Phthisis (Pulmonary Tuberculosis)	8						6	1	1	
10. Tuberculous Meningitis ...	2				1	1				
11. Other Tuberculous Diseases ...	2			1	1					
12. Cancer, malignant disease ...	6						1	2	3	1
13. Rheumatic Fever										
14. Meningitis										
15. Organic Heart Disease ...	9							2	7	3
16. Bronchitis	2	1							1	2
17. Pneumonia (all forms) ...	10	4					1	2	3	1
18. Other diseases of respiratory organs ...										
19. Diarrhœa and Enteritis ...	1	1								1
20. Appendicitis and Typhlitis ...										
21. Cirrhosis of Liver										
21a. Alcoholism										
22. Nephritis and Bright's Disease ...										
23. Puerperal Fever										
24. Other accidents and diseases of Pregnancy and Parturition ...										
25. Congenital Debility and Malformation, including Premature Birth	7	7								
26. Violent Deaths, excluding Suicide	3				1		2			5
27. Suicide										
28. Other Defined Diseases ...	42	8	1	1		2	4	9	17	8
29. Diseases ill-defined or unknown										
	101	22	2	6	4	3	15	17	32	23

Infant Mortality.

Over twenty-two per cent. of the deaths in the Guisborough Union during the year occurred among infants (under one year of age). There is no doubt that a very large proportion of these had an ante-natal cause, that is, they resulted directly from the unhealthy condition of one or both parents. The large number of deaths certified to be due to premature birth, marasmus, inanition, convulsions, &c., indicates this. A reduction in the number of such deaths cannot be expected until individuals recognise that as they are so their children will be and recognising this will lead healthy lives.

It is a matter for congratulation that Education Authorities have at last realised the necessity of teaching cooking and house-work. Much of the unhealthy condition existing proceeds from lack of nourishment, not from lack of means to obtain that nourishment but of lack of knowledge of the feeding value of the various foods and of the best means of so cooking foods as to render them digestible. This teaching requires to be carried further, general hygiene should be taught practically.

Future Action.

(1) The provision of an efficient and properly equipped hospital for cases of infectious diseases. The accommodation at present existing is insufficient to meet the needs of the district. It consists of a four-roomed cottage and a detached iron structure. Two of the rooms in the cottage are occupied by the caretaker. The only sleeping accommodation for the nurse in the cottage is one of the rooms used for patients, if both rooms are occupied by patients then she must either sleep in one of the wards in the iron building or in a room occupied by patients. When both buildings are in use, one for cases of scarlet fever the other for diphtheria, necessitating the services of two nurses one must sleep in the cottage |the other in one of the wards of the detached building. Structurally both buildings are more or less defective. Neither is properly equipped. For the removal of patients a cab requires to be hired. The position of the sanatorium is no doubt ideal but its distance from the town is such that when medical attendance is urgently required some time elapses before it can be obtained there being no telephonic communication with the town. On August 8th the Council passed a resolution to lease land nearer the town on which to erect a sanatorium, this resolution was rescinded on September 12th.

(2) The abolition of conveniences with fixed receptacles substituting water-closets.

(3) The more frequent removal of nightsoil and house refuse during the summer months.

This part of the report would not be complete without a reference to remarks made in previous years as to the necessity of *individual* action, remarks no less needed now than then. Inspections and special visits made show that in many houses the most elementary laws of health are unfulfilled,—domestic and personal cleanliness being neglected, ventilation of bedrooms more honoured in the breach than the observance, sunlight excluded by drawn blinds, &c. In too many instances little attempt is made to maintain conveniences in a cleanly condition, lime-washing of the walls of these is very rarely done. Reform of the conditions under the control of the individual is as requisite as that depending on the action of the local authority.

ADDENDUM.

Since this report was printed I have received from the Local Government Board a copy of a report on the Statistics of the Incidence of Infectious Diseases in England and Wales during the year 1913.

In an accompanying circular the Medical Officer says "It is hoped that you will utilise "these statistics in comparing your own with other districts similarly circumstanced in the same "county, and with other districts in other counties."

The factors influencing the prevalence of infectious diseases vary so much as to render it difficult to make a true comparison between one district and another. An urban district with its population massed together cannot be compared with one in which the population is scattered over a wide area. A town in which the inhabitants are mainly employed in some industry cannot be compared with one the inhabitants of which are chiefly of the commercial class. The proportion of children to adults may be much larger in one district than another; unless the proportion be known a true comparison cannot be made. One district differs from another as regards the importation of infection from without. A large number of the residents in Redcar travel to and from neighbouring towns daily, a number of children attend schools outside the district, a very large number of visitors (season and day) come into it during the summer: it is thus specially open to the importation of disease and therefore cannot be compared with any district where the conditions named do not prevail. As to scarlet fever and diphtheria no true comparison can be made unless the figures used are the average of a period of years. One district may have an epidemic one year with the result that the number of cases in the following years (4 or 5) is small. The next year another district may be subject to an epidemic.

Guisborough Rural district has the unenviable position of having the highest attack rate from scarlet fever of any rural district in the North Riding and only one *urban* district in the Riding is higher. Redcar has this unenviable position so far as regards diphtheria, it having the highest attack rate in the whole of the Riding.

The attack rate from enteric fever in the Administrative County (North Riding) was 0·19 per 1000,—in the Guisborough Union it was 0·06.

W. W. STAINTHORPE.

Table IV.

Infant Mortality.

1913. Nett Deaths from stated causes at various Ages under 1 Year of Age.

Cause of Death.	Under 1 week.	1-2 weeks.	2-3 weeks.	3-4 weeks.	Total under 4 weeks.	4 weeks & under 3 months.	3 months & under 6 months.	6 months & under 9 months.	9 months & under 12 months.	Total Deaths under 1 year.
All causes {Certified. All Uncertified.										
Small-pox										
Chicken-pox ...										
Measles									1	1
Scarlet fever										
Whooping-Cough										
Diphtheria and Croup ...										
Erysipelas										
Tuberculous Meningitis ...										
Abdominal Tuberculosis ...										
Other Tuberculous Diseases										
Meningitis (not Tuberculous)							1			1
Convulsions	1			1	2		1		1	4
Laryngitis										
Bronchitis						1				1
Pneumonia (all forms) ...						1	1	1	1	4
Diarrhœa										
Enteritis									1	1
Gastritis										
Syphilis										
Rickets										
Suffocation, overlying ...										
Injury at birth										
Atelectasis										
Congenital Malformations ...	1				1					1
Premature birth	3		1		4					4
Atrophy, Debility and Marasmus	1			1	2	1				3
Other Causes							1		1	2
	6		1	2	9	3	4	1	5	22

Nett Births in the year { legitimate 198 ; illegitimate 13

Nett Deaths in the year of { legitimate infants 22 ; illegitimate infants Nil

Saltburn,
March 28th, 1914.

I am, Gentlemen,
Yours obediently,
W. W. STAINTHORPE.